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(54) **DETERMINING WHEN TO DRIVE AUTONOMOUSLY**

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This patent is subject to a terminal disclaimer.

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G05D 1/00 (2006.01)
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CPC ***G05D 1/0061*** (2013.01); ***B60W 30/00*** (2013.01); *G05D 2201/0213* (2013.01)
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See application file for complete search history.

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(57) **ABSTRACT**

Aspects of the disclosure relate generally to determining whether an autonomous vehicle should be driven in an autonomous or semiautonomous mode (where steering, acceleration, and braking are controlled by the vehicle's computer). For example, a computer may maneuver a vehicle in an autonomous or a semiautonomous mode. The computer may continuously receive data from one or more sensors. This data may be processed to identify objects and the characteristics of the objects. The detected objects and their respective characteristics may be compared to a traffic pattern model and detailed map information. If the characteristics of the objects deviate from the traffic pattern model or detailed map information by more than some acceptable deviation threshold value, the computer may generate an alert to inform the driver of the need to take control of the vehicle or the computer may maneuver the vehicle in order to avoid any problems.

20 Claims, 11 Drawing Sheets